

Lectotypification of two names of Indian species of *Ceropegia* (Apocynaceae)

Rajeev Kr. Singh

Botanical Survey of India (BSI), Central Regional Centre (CRC), 10-Chatham Lines, Allahabad 211 002, Uttar Pradesh, India.
rksbsiadsingh@yahoo.co.in

Abstract

Two recognized species of *Ceropegia* L. from India are lectotypified here, namely, *Ceropegia macrantha* Wight and *C. wallichii* Wight.

Introduction

The genus *Ceropegia* L. is represented by 244 taxa worldwide (cf., The Plant List 2013; Singh 2015) distributed mainly in the Canary Islands, Africa, Madagascar, tropical Arabia, India, Southeast Asia, New Guinea, and Australia. Currently 60 species, two subspecies and five varieties are known to occur in India (Karthikeyan *et al.* 2009; Singh 2015). During a revision of the *Ceropegias* of India, it was realized that type material for several species had not been designated (Singh 2015). This current paper deals with a further two species, *Ceropegia macrantha* Wight and *C. wallichii* Wight, not included in the previous paper, that also require the designation of lectotypes. For lectotypification of these two Indian *Ceropegia* species, a search for the types specimens (of Wallich, Wight, Royle, Lindsay) was undertaken by searching the major collections at BM, BR, CAL, K, E, LIV, W, as well as the smaller herbaria of BHU, C, DD, G, GHU, M, MH, NY, P, PH, S. Lectotypes were chosen following the principles outlined in Art. 9.12 of the International Code of Nomenclature (McNeill *et al.* 2012).

Lectotypifications

1. *Ceropegia macrantha* Wight, Contributions to the Botany of India 31 (1834)

Type citation: “Ad locum “Khurie pass” dictum; Royle.”

Lectotype (here designated): India, N.W. India, without date, Royle *s.n.* (K000857826!); isolectotype: K000857827! **Fig. 1**

Distribution: India (except Peninsular region), Bhutan, Laos, Nepal and Pakistan.

Notes: Robert Wight (1834) described *Ceropegia macrantha* on the basis of specimens collected by Royle. In the protologue he did not provide the date and/or number of the collection but simply cited “Ad locum “Khurie Pass” dictum; Royle” as type. Pertaining to this specification, only two original collections of [Herb.] Royle are now extant, namely, K000857826 and K000857827. The herbarium sheet K000857826, consists of complete plant specimens with stem, leaves and flowers and is chosen here as the lectotype as it agrees well with the protologue.



Fig. 1. Lectotype of *Ceropogia macrantha* Wight (K000857826, © the Board of Trustees of the Royal Botanic Gardens, Kew).



Fig. 2. Lectotype of *Ceropegia wallichii* Wight (E00179561, © Royal Botanic Garden, Edinburgh).

2. *Ceropegia wallichii* Wight (*Botanical Magazine* sub t. 3267. 1833, *nom. nud.*), *Contributions to the Botany of India* 32 (1834)

Type citation: “Wight in bot. mag. tab. 3267. – *C. erecta*, Wall.!? *Asclep. n. 1* (*spec. valde manca*). – Nepal; Wallich (*in herb. Banks, spec. bon.*) Himalaiah; Royle. Prope Lahooghat in Kamaon; Lindsay (*in herb. Arnott.*) – (R. W.)”

Lectotype (designated here): India, Kamaon (Kumaon), Lahooghat, without date, A.K. Lindsay s.n. (E00179561); isolectotype: K000975598! **Fig. 2**

Residual syntypes: Nepal, 1821, Wallich *asclep. no. 1.* (K001129063); Nepal, 1820, Wallich s.n. (BM001014224 p.p.)

Distribution: India (Himachal Pradesh, Punjab and Uttarakhand) and Nepal.

Notes: When *Ceropegia wallichii* Wight (1834) was published, four gatherings – *C. erecta*, Wall. *Asclep. n. 1.*; Nepal, Wallich; Himalaiah (Himalaya), Royle; Lahooghat in Kamaon (Kumaon), A.K. Lindsay were cited in the protologue, but no specific herbarium sheet was designated as the holotype. Royle’s gathering could not be located but there are four extant specimens representing the other three gatherings, two of the A.K. Lindsay collection (E00179561 and K000975598), one of *C. erecta*, Wall. *Asclep. n. 1.* (K001129063) and one of Wallich in herb. Banks (BM001014224). The BM herbarium sheet is a mixed collection, the two plant specimens on left side belong to Wallich from Nepal and the two on right side from Nainital, Uttarakhand state, India of an unknown collector. From these four syntypes, E00179561 has complete plant specimens with stem, leaves and flowers and hence I designate it here as lectotype since it agrees well with the protologue.

Acknowledgments

The author is thankful to the Director, Botanical Survey of India (BSI), Kolkata and to the Head of Office, BSI, Central Regional Centre, Allahabad for facilities. I am also grateful to Curators of BM, E and K herbaria for information and images of type specimens.

References

- Karthikeyan S, Sanjappa M, Moorthy S (2009) *Flowering Plants of India: Dicotyledons (Acanthaceae–Avicenniaceae)*, vol. 1, pp. 160–164 (Botanical Survey of India, Kolkata)
- McNeill J, Barrie FR, Buck WR, Demoulin V, Greuter W, Hawksworth DL, Herendeen PS, Knapp S, Marhold K, Prado J, Proud’homme van Reine WF, Smith GF, Wiersema JH, Turland NJ (eds.) (2012) International Code of Nomenclature for algae, fungi and plants (Melbourne Code): Adopted by the Eighteenth International Botanical Congress, Melbourne, Australia, July 2011. *Regnum Vegetabile* 154: 1–274
- Singh, RK (2015) Lectotypifications of some Indian *Ceropegia* (Apocynaceae: Ceropegieae). *Phytotaxa* 197 (2): 157–160 <http://dx.doi.org/10.11646/phytotaxa.197.2.9>
- The Plant List (2013) *The Plant List*. Version 1.1. Available from: <http://www.theplantlist.org/> (accessed 23rd September, 2014)